Atty Docket: 2639A

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application/Patent No:

SEE EXHIBIT A

Filing Date/Issue Date:

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# POWER OF ATTORNEY BY NUANCE COMMUNICATIONS, INC. AND REVOCATION OF PRIOR POWERS AND CHANGE OF CORRESPONDENCE ADDRESS

As an authorized representative of Assignee for the applications/patents identified on the attached Exhibit A, I hereby revoke all powers of attorney previously given and I hereby appoint the attorneys associated with

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as our attorneys and agents to prosecute and transact all business in the Patent and Trademark Office connected therewith.

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NUANCE COMMUNICATIONS, INC.

By: \_\_\_\_\_\_ Date: 2/1/2010, 2010

Name: Lengar T. F. Figar ld

Title: Assocuto general (ansel

### EXHBIT A

## **APPLICATIONS**

Attorney	Application	Filing	Publication	Publication	
Docket	Number	Date	Number	Date	Application Title
2639A.103	10/563,072		US-2007-0127736	•	Handsfree System For Use In A Vehicle
2639A.105	11/271,503	11/12/2005	US-2006-0147054		Microphone Non-Uniformity Compensation System
2639A.107	10/534,764	5/12/2005	US-2006-0195324	•	Voice Input Interface
2639A.109	11/083,190		2005-0213778		System for Detecting and Reducing Noise via a Microphone Array
2639A.110	11/229,027	9/16/2005	2006-0106619-A1	5/18/2006	Bandwidth Extension of Bandlimited Audio Signals
2639A.111	11/234,837	9/23/2005	US-2006-0222184		Multi-Channel Adaptive Speech Signal Processing System with Noise Reduction
2639A.112	11/218,687	9/2/2005	US-2006-0153360	7/13/2006	Speech Signal Processing with Combined Noise Reduction and Echo Compensation
2639A.113	11/012,079	12/14/2004	US-2006-0126822	6/15/2006	System for Limiting Receive Audio
2639A.114	11/749,678	5/16/2007	US-2008-0031471		System For Equalizing An Acoustic Signal
2639A.116	11/376,001	3/14/2006	US-2006-0253282	11/9/2006	System for Automatic Recognition of Vehicle Operating Noises
2639A.117	11/775,687	1/9/2006	US-2008-0025527		Feedback Reduction In Communication Systems
2639A.117	11/867,124	10/4/2007		Ì	Feedback Reduction System
2639A.118	11/343,938	1/31/2006	US-2006-0190245	8/24/2006	System for Generating a Wideband Signal from a Received Narrowband Signal
2639A.119	11/776,432	7/11/2007	US-2008-0015845	1/17/2008	Audio Signal Component Compensation System
2639A.120	11/789,798	4/25/2007	US-2008-0031469	2/7/2008	Multi Channel Echo Compensation System
2639A.121	11/925,323	2/13/2006			Detection And Suppression Of Wind Noise In Microphone Signals
2639A.122	11/492,675	7/25/2006	US-2007-0135061	6/14/2007	Vehicle Communication System
2639A.123	11/544,470	10/6/2006	US-2007-01241140	5/31/2007 ·	Method for Extending the Spectral Bandwidth of a Speech Signal
2639A.124	11/679,695	7/27/2007			Hands-Free System for Speech Signal Acquisition
2639A.127	11/657,408	1/24/2007			Sampling Rate Conversion System
2639A.128	11/701,184	1/31/2007	2008-0059155	3/6/2008	Spectral Bandwidth Extended Audio Signal System
2639A.129	11/834,591	8/6/2007	2008-0154613	6/26/2008	Voice Command Processing System In A Vehicle Environment
2639A.130	11/788,069	4/18/2007	US-2008-0031467	2/7/2008	Echo Reduction System
2639A.131	11/843,437	8/22/2007			System for Extending the Bandwidth of a Narrowband Signal
2639A.132	11/767,803	6/26/2007	US-2008-0027722	1/31/2008	Background Noise Reduction System
2639A.133	11/865,930	10/2/2007			Vehicle Voice Control System
2639A.134	11/832,445	8/1/2007	US-2008-0292108	11/27/2008	Reverberation System for Use in a Signal Processing Apparatus
2639A.135	11/948,137	11/30/2007	US-2008=0195382	8/14/2008	Spectral Refinement System
2639A.136	11/928,251	10/30/2007	US-2008-0140396	6/12/2008	Model-Based Enhancement System
2639A.137	12/241,788	9/30/2008			Efficient Audio Signal Processing in the Sub-Band Regime

Attorney	Application	Filing	Publication	Publication	Application Title
<b>Docket</b> 2639A.138	<b>Number</b> 12/015,907	Date	Number US-2008-0195392	Date 9/14/2009	System For Providing An Acoustic Signal
2039A.136		1/1//2006	US-2006-0193392		With Extended Bandwidth
2639A.139	11/955,862	12/13/2007	US-2008-0144848	5 1	Low Complexity Echo Compensation System
2639A.140	12/013,955	1/14/2008			Speech Fundamental Frequency Estimator
2639A.141	12/104,836	4/17/2008	US-2008-0285772	11/20/2008	Acoustic Localization Of A Speaker
2639A.142	12/047,874	3/13/2008	US-2009-0030699		Providing A Codebook For Bandwidth Extension Of An Acoustic Signal
2639A.143	12/174,595	7/16/2008			System for Processing Sound Signals in a Vehicle Multimedia System
2639A.144	12/125,298	5/22/2008	US-2008-0298602		System For Processing Microphone Signals To Provide An Output Signal With Reduced Interference
2639A.145	12/118,205	5/9/2008	US-2008-0304679		System for Processing An Acoustic Input Signal To Provide An Output Signal With Reduced Noise
2639A.146	12/202,147	8/29/2008			System for Speech Signal Enhancement in a Noisy Environment Through Corrective Adjustment of Spectral Noise Power Density Estimations
2639A.148	12/189,545	8/11/2008	US-2009-0067642	3/12/2009	Noise Reduction By Combined Beamforming And Post-Filtering
2639A.149	12/254,488	10/20/2008			Partial Speech Reconstruction
2639A.150	12/246,994	10/7/2008			Gain and Spectral Shape Adjustment in Audio Signal Processing
2639A.151	12/263,227	10/31/2008			Method For Dereverberation Of An Acoustic Signal
2639A.152	12/269,605	11/12/2008			System Enhancement Of Speech Signals
2639A.153	12/269,837	11/12/2008			System for Distinguishing Desired Audio Signals from Noise
2639A.157	12/357,258	1/21/2009	2009-0192796	7/30/2009	Filtering of Beamformed Speech Signals
2639A.181	11/932,355	10/31/2007	US-2008-0249779	10/9/2008	Speech Dialog System
2639A.182	10/562,354	12/27/2005	US-2007-0118380	5/24/2007	Method and Device for Controlling a Speech Dialog System
2639A.183	11/051,127	2/4/2005	US 2005-0216271		Speech Dialog System for Controlling an Electronic Device
2639A.184	11/603,265	11/21/2006	US-2007-0156405	•	Speech Recognition System
2639A.188	11/454,612		US-2007-0136060	1	Recognizing Entries In Lexical Lists
2639A.189	11/499,139	8/3/2006	US-2007-0156407	_1	Integrated Speech Dialog System
2639A.190	11/360,024		US-2006-0206331		Multilingual Speech Recognition
2639A.192	11/865,443	10/1/2007	US-2008-0091426	4/17/2008	Adaptive Context for Automatic Speech Recognition Systems
2639A.192	60/851,149	10/12/2006			Adaptable Context For Improved Automated Speech Recognition Performance
2639A.193	11/837,218	8/10/2007			Statistical Language Modeling Using Square-Root Discounting
2639A.194	11/948,075	11/30/2007	US-2008-0221891	9/11/2008	Interactive Speech Recognition System
2639A.195	11/957,883	12/17/2007	US-2008-0189106	8/7/2008	Multi-Stage Speech Recognition
2639A.196	12/058,527	3/28/2008			Multilingual, Non-Native Speech Recognition

Attorney Docket	Application Number	Filing Date	Publication Number	Publication Date	Application Title
2639A.197	11/951,904	12/6/2007	US-2008-0147397	6/19/2008	Speech Dialog Control Based On Signal Pre-Processing
2639A.198	11/955,233	12/12/2007			Speech Recognition System
2639A.199	12/023,485	1/31/2008	US-2008-0262849	10/23/2008	Voice Control System
2639A.A02	12/247,201	10/7/2008			Context Sensitive Multi-Stage Speech Recognition
2639A.A03	12/264,049	11/3/2008			System for Preparing Data for Speech Recognition and Speech Recognition System
2639A.A04	12/258,338	10/24/2008	2009-0112593	4/30/2009	Method And System For Recognizing Speech For Searching A Database
2639A.A05	12/249,089	10/10/2008			Speaker Recognition System
2639A.A07	12/355,476	1/16/2009	2009-0210230	8/20/2009	Speech Recognition on Large Lists Using Fragments
2639A.A10	12/416,768	4/1/2009			Multilingual Weighted Codebooks
2639A.A33	10/556,232	5/10/2004	US 2007-0053524	8/3/2007	Method and System for Communication Enhancement in a Noisy Environment
2639A.A34	11/924,987	10/26/2007	US-2008-0107280	5/5/2008	Noisy Environment Communication Enhancement System
2639A.A36	11/860,194	9/24/2007			Voice Interface System
2639A.A38	11/787,348	4/16/2007	US-2008-0031466	2/7/2008	Multi-Channel Echo Compensation System
2639A.A40	12/415,927	3/31/2009			Detecting Barge-In in a Speech Dialogue System
2639A.A41	11/701,629	2/2/2007	US 2007-0172079	7/26/2007	Handsfree Communication System
2639A.A42	10/562,355	6/30/2004	US-2007-0198268		System for Controlling a Speech Dialog System and Speech Dialog System

# **PATENTS**

Attorney Docket	Application Number	Filing Date	Patent Number	Issue Date	Application Title
2639A.101	10/121,180	4/12/2002	7,020,291	1	Noise Reduction Method With Self-Controlling Interference Frequency
2639A.171	08/171,472	12/23/1993	5479517		Method For Estimating Propagation Times Of Noisy Speech Channels
2639A.172	08/208,747	3/11/1994	5,400,409	3/21/1995	Noise Reduction Method For Disturbed Speech Channels
2639A.175	09/214,910	7/2/1997	6,687,669	2/3/2004	Method For Reducing Noise In A Speech Signal
2639A.176	09/530,527	10/22/1998	6643619		Method For Reducing Noise In Acoustic Signals Using The Adaptive Filter Method Of Spectral Subtraction
2639A.177	09/285,064	4/2/1999	6,895,095	5/17/2005	Method For Eliminating Interference In A Microphone
2639A.178	10/324,737	12/18/2002	7,392,182	6/24/2008	Speech Recognition System
2639A.179	10/769,028	1/29/2004	7,460,995	12/2/2008	System For Speech Recognition
2639A.186	11/044,815	1/26/2005	7,454,351	11/18/2008	Speech Dialogue System for Dialogue Interruption and Continuation Control
2639A.187	10/966,781	10/15/2004	7,555,533	6/6/2009	Communication System
2639A.A24	08/875,262	11/23/1995	6,023,677	2/8/2000	Method For Speech Recognition
2639A.A26	09/043,134	9/9/1996	6,839,670		Process For Automatic Control Of One Or More Devices By Voice Commands Or By Real-Time Voice Dialog And Apparatus For Carrying Out This Process
2639A.A28	09/581,408	12/2/1998	7,020,606		Voice Recognition Using A Grammer Or N-Gram Procedures
2639A.A29	09/277,954	3/29/1999	6,895,117	5/17/2005	Recognition System Method
2639A.A39	11/855,575	9/14/2007	7,554,465	6/30/2009	Sampling Rate Conversion System

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STATEMENT UNDE	ER 37 CFR 3.73(b)					
Applicant/Patent Owner: Tim Haulick, et al.						
Application No./Patent No.:7,643,641	Filed/Issue Date: 5 January 2010					
Titled: System for Communication Enhancement in a Noisy En	vironment					
Nuance Communications, Inc. , a Corpor	ration					
(Name of Assignee) (Type of	of Assignee, e.g., corporation, partnership, university, government agency, etc.					
states that it is:						
1. $\overline{\mathbf{X}}$ the assignee of the entire right, title, and interest in;						
2. an assignee of less than the entire right, title, and interest (The extent (by percentage) of its ownership interest is						
3. the assignee of an undivided interest in the entirety of (a d	complete assignment from one of the joint inventors was made)					
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[NOTE: A separate copy (i.e., a true copy of the original assignment accordance with 37 CFR Part 3, to record the assignment in the	gnment document(s)) must be submitted to Assignment Division in ne records of the USPTO. <u>See</u> MPEP 302.08]					
The undersigned (whose title is supplied below) is authorized to act of	on behalf of the assignee.					
/John J. Stickevers, #39,387/	April 26, 2010					
Signature	Date					
John J. Stickevers Attorney for Assignee	(617) 443-9292					
Printed or Typed Name Title						

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